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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,004	07/29/2003	Paul Adams	BIC-017	7347
29626	7590	07/18/2006	EXAMINER	
THE H.T. THAN LAW GROUP WATERFRONT CENTER SUITE 560 1010 WISCONSIN AVENUE NW WASHINGTON, DC 20007			ALEJANDRO, RAYMOND	
			ART UNIT	PAPER NUMBER
				1745

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/629,004	ADAMS ET AL.	
	Examiner Raymond Alejandro	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) 10-13 and 51-110 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 and 14-50 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 June 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

This communication is being offered in reply to the amendment 06/23/06. The applicant has overcome the objection and most of the 112 rejections but has not overcome a 112 rejection and the art rejections including multiple 35 USC 102 and 103 rejections. Refer to the aforesaid amendment for additional information regarding applicant's rebuttal arguments and remarks. Therefore, the present claims are finally rejected over the same applied art as set forth hereunder and for the reasons of record:

### *Election/Restrictions*

1. On page 20-21 of the 06/23/06 amendment, applicant now is traversing the Restriction Requirement dated 03/20/06. However, in the Response to the Restriction Requirement dated 05/05/06 applicant indicated clearly that the election is without traverse (See page 2, 1<sup>st</sup> full paragraph). In this respect, the examiner asserts that it is totally unusual to first elect an invention without traverse, and then after first examination on the merits of the present claims, to include a traverse of the restriction requirement. This definitely deviates from the proper course of action for purposes of claim examination. **MPEP 818.01 Election Fixed by Action on Claims** states that election becomes fixed when the claims in an application have received an action on their merits by the Office. **MPEP 818.03(a) Reply Must Be Complete** states, *inter alia*, “*the applicant's or patent owner's reply must appear throughout to be a bona fide attempt to advance the application or the reexamination proceeding to final action. . .*”. Clearly, this is not the case. In traversing the rejection at this point, applicant is asking to reconsider the restriction requirement after a first non-final action on the merits of the elected invention, perhaps to force

the introduction of new grounds of rejection not necessitated by applicant's amendment in the event the restriction requirement be withdrawn, thereby forcing the issuance of a second non-final rejection to so address any non-elected inventions. Clearly, this does not advance prosecution. Generally speaking, ***MPEP 819 [R-3] Office Generally Does Not Permit Shift*** states that the general policy of the Office is not to permit the applicant to shift to claiming another invention after an election is once made and action given on the elected subject matter. This may also be the case here if the restriction requirement is withdrawn.

2. However, in order to address applicant's traversal the following is stated:

Applicant's election with traverse of Group I and Species 2 (claims 1-9 and 14-50) in the reply filed on 06/23/06 is acknowledged. The traversal is on the ground(s) that "*the search and examination of an entire application can be made without serious burden*". This is not found persuasive because the restriction requirement dated 03/20/06 set out two separate and distinct inventions identified as ***Group I*** (claims 1-62 and 80-110) directed to fuel cartridges connectable to fuel cells classified in class 220/586 or 215/3 or 429/34 and ***Group II*** (claims 63-79) directed to relief valves classified in class 251/366.

In establishing the burden, the examiner relies first on the definition of distinct groups by virtue of the relationship between Group I and Group II, which were identified to be related as combination and subcombination, and second by the guidelines established in ***MPEP 808.02 [R-3] Establishing Burden*** setting forth that serious burden is present if at least one of following criteria is met: A) each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search (***Separate classification thereof***); and/or B) it is necessary to search for one of the inventions in a manner that is not likely to result in finding

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art pertinent to the other invention(s) (e.g., searching different classes /subclasses or electronic resources, or employing different search queries, a different field of search is shown, even though the two are classified together (*A different field of search*); and/or C) each invention can be shown to have formed a separate subject for inventive effort when the examiner can show a recognition of separate inventive effort by inventors, this can be established by at least showing a separate field of search (*A separate status in the art when they are classifiable together*). In the instant case, Group I and II meet at least criteria A) and B) above for the reasons expressed supra.

3. With respect to the requirement of election of species, it is noted that as admitted by the applicant and disclosed in the specification, the present application contains multiple, several, numerous embodiments represented by either a) the identification of species as delineated in the restriction requirement of 03/20/06, or b) Figures 1, 4, 7-10, 12A-B and 13. Therefore, the disclosure encompasses different and separated embodiments which are mutually exclusive. Applicant's attention is particularly directed to MPEP 809.02(a) which indicates how to identify species by illustrative figures, examples, mechanical means, particular materials, or other distinguishing characteristics. Accordingly, serious burden would be raised if the search of such different species was made as required for the separate, distinct and mutually exclusive species.

4. Applicant's argument regarding the absence of lack of unity of invention in a related PCT application containing substantially the same set of claims/inventions is irrelevant to Section 121. As applicant have already recognized, the standards of unity of invention in the ISA and independent or distinct inventions in USPTO are not identical. Therefore, this argument does not substantiate withdrawal of restriction requirement under 35 USC 121.

The requirement is still deemed proper and is therefore made **FINAL**.

***Drawings***

5. The drawings were received on 06/23/06. These drawings are acceptable.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 32 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claims 32 and 37, the phrase "poppet-type valve" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "type"), thereby rendering the scope of the claim(s) unascertainable.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

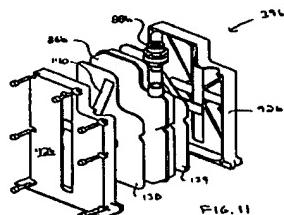
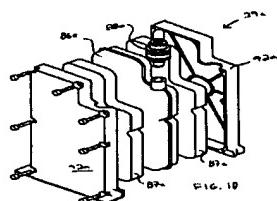
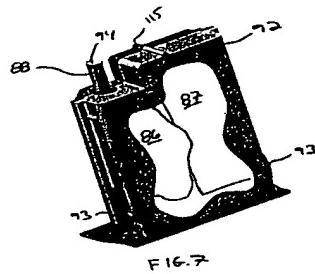
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10. (*As best understood*) Claims 1-9, 14-15, 17-32, 38-47 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Lawrence et al 2002/0197522.

The present applicant gears toward a fuel cartridge wherein the disclosed inventive concept comprises the specific outer/inner features thereof.

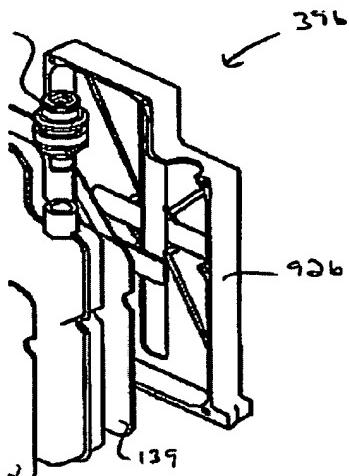
As to claim 1:

Lawrence et al disclose a removable fuel cartridge for use in a fuel cell assembly (ABSTRACT) wherein the fuel cartridge includes an expandable (*thus flexible*) fuel bladder for receiving liquid fuel, an expandable (*thus flexible*) pressure member in contact with the bladder for maintaining a positive pressure on the bladder, and a sealable exit port in fluid communication with the bladder (ABSTRACT). Figures 7 and 10-11 below illustrate the configuration of the fuel cartridge including an insert inside the cartridge. *It is also contended that the fuel per se inside the container is also an insert disposed inside the inner liner.*



As to claims 2-7, 9 and 24:

Figures 10-11 above illustrate insert being integral with the cartridge wall and includes a plurality of ribs (See Figures 10-11/See also enlarged portion below). *As illustrated below, what the examiner considers the ribs (the elements protruding from the surface of the cartridge) have a degree of rigidity and flexibility and they form a meshed configuration (web or interlocked members). It is noted that the terms "rigid" and "flexible" are relative terms, and the present claims do not further stipulate their degree or extent.*

As to claim 8:

Disclosed is that the expandable pressure member is a compressed foam member (P0076,0095).

As to claims 14-15 and 29-32:

Disclosed is that fuel delivery system 40 fluidly connects fuel bladder 86 of replaceable fuel cartridge 39 to the fuel chamber of the anode plate 37 (of the fuel cell), and it includes a duck-bill valve (P.0079). Other one-way valves can be utilized (P0080). *The valve itself has an*

*opening/hole having disposed therein a valve stem preventing fluid from passing therethrough, therefore, that feature acts as the claimed liquid impermeable membrane.*

As to claims 17-19

The cartridge includes a rigid canister 93 (P0074) wherein the canister is dimensioned and configured such that the fuel bladder is capable of holding fuel (P0074). *Thus, it has an internal support structure. Figures 10-11 above also illustrate the structure of the cartridge. It is noted that the terms "rigid" and "flexible" are relative terms, and the present claims do not further stipulate their degree or extent. Thus, the cartridge of Lawrence et al exhibit a reduce degree of flexibility.*

As to claim 20:

The cartridge includes a self-sealing membrane (P.0077).

As to claims 21 and 25:

The cartridge includes a sealable port 88 (P0076). *Thus, the cartridge has an open structure.*

As to claims 22-23 and 26-28

The cartridge includes a septum 94 which includes a substantially self-sealing membrane (P.0077). *This septum is liquid impermeable. It is noted that said septum acts as lid covering the sealable port.*

As to claims 38-42 and 44:

Lawrence et al disclose the cartridge includes the expandable pressure member which is a compressed foam member (P0076,0095). A spring biased member can also be used to exert a force against the fuel bladder (P.0076). *It is noted that the empty space surrounding the spring*

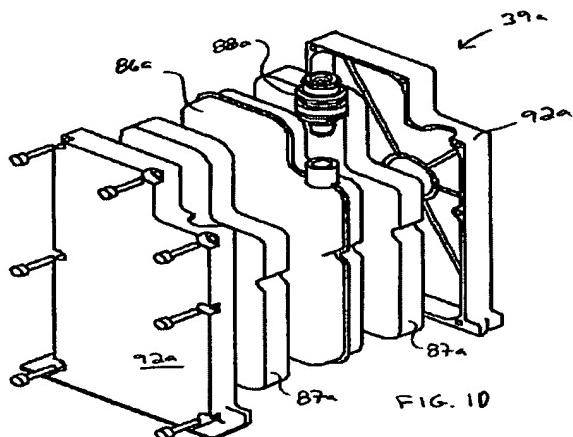
*biased member and/or the foam member is filled with air (a gas) subject to compressing forces due to the pressure exerted by the members.*

As to claim 43:

Lawrence et al teach that the container is removable (P0011-0012). *Thus, fuel refilling container may be connected thereto.*

As to claims 45-47:

Members represented by reference numerals 87a (Figure 10) and 140 (Figure 11 above) represent movable features which may act as the claimed movable wall comprising a seal further comprising a wiper pressing against the outer casing.



As to claim 50:

The limitation that the inner liner is colored is inherent to the construction material of the inner liner.

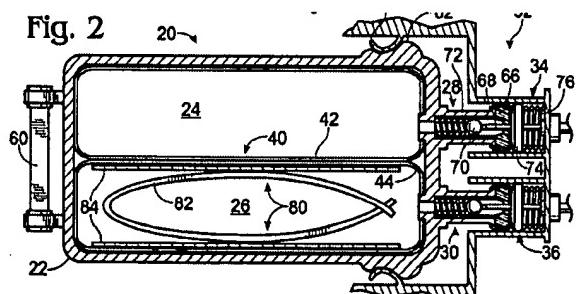
11. (As least) Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Acker et al 6460733.

Acker et al disclose a multiple-walled fuel container (TITLE) for use with a fuel cell (ABSTRACT) including an outer casing 54 fabricated from a plastic; an inner tank 56 which is a flexible bladder which is fully expandable by filling it with a fuel (COL 5, lines 55-67). It is further disclosed that additives may be placed within the inner tank (COL 6, lines 53-59). *Thus, it has an insert.*

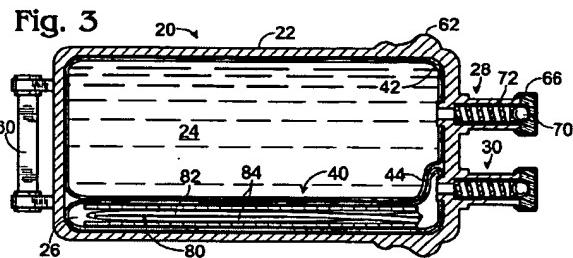
Thus, the present claim is anticipated.

12. (*As least*) Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Prasad et al 2003/0082427.

Prasad et al disclose a fuel supply configured to be removably coupled to a fuel cell (TITLE/P0020). Figures 2-3 below illustrate the fuel supply including a fuel storage area configured to hold a fuel solution, a fuel solution outlet, a waste storage area, and a waste inlet and a movable barrier separating the fuel storage area and the waster storage area (ABSTRACT). Valves may be used for fuel solution outlet and waste inlet (P0036). Each of fuel solution outlet 28 and waste inlet 30 includes a redundant septum/ball-and-spring valve system (*serving as the nozzle*) which are self-sealing (*the membrane or absorbent material*) (P.0036, 0038). *Thus, it has an insert.*



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Thus, the present claim is anticipated.

13. (*As least*) Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Herdeg et al 6610433.

Herdeg et al disclose a fuel tank (TITLE) for a fuel cell system having a cavity of variable size and a mechanism for compressing the fuel cavity. The fuel cavity is bounded by a cylindrical inner wall of the fuel tank, by a circular end surface of the fuel tank and by a circular displaceable intermediate wall (ABSTRACT). *Thus, it has an insert.*

Thus, the present claim is anticipated.

14. (*As least*) Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kinkelaar et al 2003/0008193.

Kinkelaar et al disclose a liquid fuel delivery system for a fuel cell including a container defining a volume for holding a liquid fuel; a reservoir structure positioned within the volume and into which at least a portion of the liquid fuel wicks and from which said liquid fuel subsequently may be metered (ABSTRACT). *Thus, it has an insert.*

Thus, the present claim is anticipated.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 16, 33-37 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al 2002/0197522 as applied to claim 1, 15 and 45 above, and further in view of Prasad et al 2003/0082427.

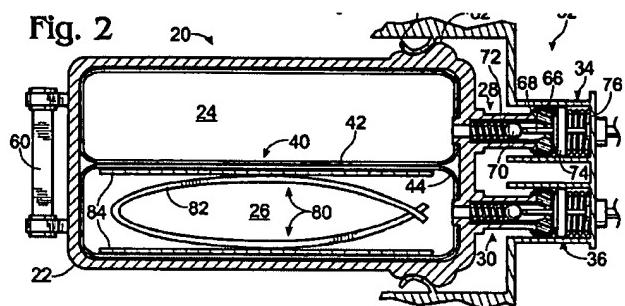
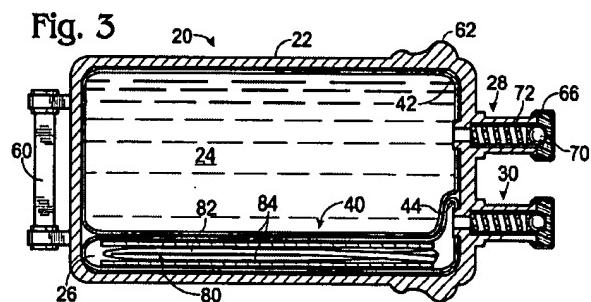
Lawrence et al is applied, argued and incorporated herein for the reasons above.

However, the preceding prior art of record does not expressly disclose the specific valve nozzle; transporting by-product to the outer casing including the two valve arrangement; and the outer casing having a film thereon.

**As to claims 16 and 33-37:**

Prasad et al disclose a fuel supply configured to be removably coupled to a fuel cell (TITLE/P0020). **Figures 2-3** below illustrate the fuel supply including a fuel storage area configured to hold a fuel solution, a fuel solution outlet, a waste storage area, and a waste inlet and a movable barrier separating the fuel storage area and the waster storage area (ABSTRACT). Valves may be used for fuel solution outlet and waste inlet (P0036). Each of fuel solution outlet 28 and waste inlet 30 includes a redundant septum/ball-and-spring valve system (*serving as the nozzle*) which is self-sealing (*the membrane or absorbent material*) (P.0036, 0038).

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**Fig. 2****Fig. 3****As to claim 48:**

Prasad et al reveals that the fuel container may also be made from a multi-layered structure comprising a polymeric material (P.0029-0031, 0034-0035).

In view of the above, it would have been obvious to a skilled artisan at the time the invention was made to use the specific valve nozzle of Prasad et al in the fuel container of Lawrence et al because Prasad et al disclose that such a specific feature is a self-sealing connector that automatically sealed whenever fuel supply is used, and it provides a sealing mechanism that provides more security against leakage.

As to transporting by-product to the outer casing including the two valve arrangement, it would have been obvious to a skilled artisan at the time the invention was made to transport by-product to the outer casing including the two valve arrangement to the fuel container of Lawrence et al as taught by Prasad et al as Prasad et al disclose that such a feature allow to simultaneously reduce the volume of fuel storage area and increasing the volume of waste

storage area to permit the interior volume of outer casing/container to be used more efficiently than if fuel storage area and waste storage area were of fixed volume. Thus, it optimizes the use of space within the fuel supply container.

Regarding the outer casing having a film thereon, it would have been obvious to a skilled artisan at the time the invention was made to coat a film on Lawrence et al' outer container as taught by Prasad et al because Prasad et al disclose that inner and outer containers may also be made of a multi-layered structure comprising polymeric material to improve mechanical stability of the container, to improve barrier/sealing characteristics by forming a high-gas barrier layer and to reduce permeability by using low gas permeability materials. Thus, a coat or a film on the external surface of inner/outer containers provides the foregoing benefits.

17. Claims 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al 2002/0197522 in view of Prasad et al 2003/0082427 as applied to claim 48, and further in view of Ramanathan et al 2004/0096610.

Lawrence et al and Prasad et al are applied, argued and incorporated herein for the reasons above. However, the preceding prior art does not expressly disclose the specific cartridge material.

Ramanathan et al disclose that it is known to make fuel tanks (TITLE) by using polytetrafluoroethylene (CLAIM 24) because such a material bonds to low energy surface materials and has fuel barrier properties.

Thus, it would have been obvious to a skilled artisan at the time the invention was made to use the specific cartridge material of Ramanathan et al in the fuel container of Lawrence et al

and Prasad et al because Ramanathan et al teach that such a material bonds to low energy surface materials and has fuel barrier properties. As a result, polytetrafluoroethylene, when used as a fuel container material, exhibits good fuel barrier properties.

***Response to Arguments***

18. Applicant's arguments filed 06/23/06 have been fully considered but they are not persuasive.

19. With respect to applicant's arguments concerning Lawrence et al'522, applicant argues that "*Claim 1 recites both "fuel" and "insert". Hence, fuel is not an insert as these terms are used in claim 1*". The examiner respectfully disagrees. Nothing in the present claims clearly stipulates that fuel is not an insert, or that the insert is not fuel, or that the claimed insert is at least different from the fuel. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the instant case, it can be reasonably contended that a first portion of fuel is a per se fuel while a second portion thereof is per se insert. Thus, from a fluid mechanic perspective, the second portion of fuel assists the first portion of fuel for transport purposes, or vice-versa.

Applicant also overlooks the embodiment illustrated in Figure 10 including two expandable pressure members 87a contacting fuel bladder 86a wherein each expandable pressure member 87a is a compliant foam member. While applicant can argue that claim antecedent basis requires the insert to be disposed inside the inner flexible liner, the examiner contends that nowhere is set forth that the purported fuel be disposed inside the same inner flexible liner in

which the insert is disposed. Additionally, it is contended that the open-ended transitional language “*comprising*” permits the inclusion of additional features. Can the inner flexible liner as a whole be two separate liners? There is no such specific indication about the structure of the claimed liner in the present claims.

20. With respect to applicant’s arguments concerning Acker et al’733, applicant argues that “*in Acker, the additives and the fuel are stored separately during the useful life of the fuel container and only become mixed with at the end of the fuel container’s useful life...*”. Well, the examiner contends that mixing the additive with the fuel at the end of the fuel container’s useful life fully satisfies the claimed requirement of having the inner flexible liner comprising both an insert and fuel disposed inside the inner flexible liner. Again, nothing in the present claim language stipulates that the insert needs to be disposed inside the inner flexible liner during the fuel container’s useful life so as to facilitate the transport of fuel (*←emphasis supplied*). Further, having the additive disposed in the fuel container as Acker et al’733 does during the fuel container’s useful life provides mechanical support which assists the fuel to flow out of the fuel container.

In response to applicant’s argument that “*The additives cited in Acker do not function to facilitate the transport of fuel*” as recited in claim 1”, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

21. With respect to applicant's arguments concerning Prasad et al'427, applicant argues that "*As can clearly be seen in FIG. 2 from Prasad below, the alleged redundant insert is disposed outside of fuel storage area 24 and outside flexible inner container 42*".

It is asserted that waste storage area 26 includes pressurizer 80, spring 82 and plates 84 (paragraphs 0042-0043 and Figure 2 of Prasad et al'427), and super-absorbent materials (paragraph 0035 of Prasad et al'427). During operation, waste storage area 26 receives exhaust fuel; and movable barrier 40 is configured to move as fuel is removed from fuel solution, simultaneously reducing the volume of fuel storage area 24 and increasing the volume of waste storage area 26; the movement of movable barrier 40 allows the relative volumes of fuel storage area to vary inversely to accommodate these fluid volume changes (paragraph 0026 of Prasad et al'427). (**Emphasis added→**) Thus, during operation, volume increasing of expandable waste storage area 26 containing exhausted fuel and inserts 80, 82, 84 and absorbent material facilitates the transport of fuel from the cartridge as instantly claimed by virtue of the movement of movable barrier 40. In this case, exhausted fuel still contains fuel. Therefore, expandable waste storage area 26 comprises both fuel and inserts inside of it, and assists in fuel transport from the cartridge.

22. With respect to applicant's arguments concerning Herdeg et al'433, applicant argues that "*nothing is disclosed about a flexible liner or bladder, as claimed in claim 1*". In this respect, the examiner states that the fuel tank as a whole having a cavity of variable size and a mechanism for compressing the fuel cavity including an intermediate wall 6 encompasses the fuel cartridge comprising both an outer casing and an inner flexible liner.

A first interpretation of the teachings of Herdeg et al'433 may be that fuel cavity 10 in combination with wall 6 corresponds to the outer casing, and space 11 in combination with wall 6 corresponds to the inner flexible liner containing fuel. Note that the present claims do not require the outer casing enclosing or housing the inner flexible liner; additionally, the present claims do not exclude the outer casing from containing fuel and transporting fuel from the fuel cartridge to the fuel cell. (*Emphasis added→*) In this regard, note also that minimum residual amounts of fuel are left in space 11 when displaceable intermediate wall 6 moves in the direction of the fuel cavity. Unless applicant provides objective evidence to demonstrate that no residual amounts of fuel are left in space 11 (that is to say, 100 % of fuel is removed or evaporated in space 11), the examiner verily believes that his position is reasonable, valid, and sufficient to substantiate a prima-facie case of anticipation. Bear in mind that Herdeg et al'433 neither disclose that no residual amount is left therein, nor does Herdeg et al'433 envision cleaning or washing space 11.

A second interpretation of the teachings of Herdeg et al'433 may also be just opposite the first interpretation. Namely, fuel cavity 10 in combination with wall 6 corresponding to the inner flexible liner containing fuel, and space 11 in combination with wall 6 corresponding to the outer casing. Note that the present claims do not require the outer casing enclosing or housing the inner flexible liner. As such, it is averred that nothing in the present claims clearly stipulates that fuel is not an insert, or that the insert is not fuel, or that the claimed insert is at least different from the fuel. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the instant case, it can be reasonably contended that a first

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portion of fuel is a per se fuel while a second portion thereof is per se insert. Thus, from a fluid mechanic perspective, the second portion of fuel assists the first portion of fuel for transport purposes, or vice-versa.

Also, while applicant can argue that claim antecedent basis requires the insert to be disposed inside the inner flexible liner, the examiner contends that nowhere is set forth that the purported fuel be disposed inside the same inner flexible liner in which the insert is disposed or that the insert is disposed within the inner flexible fuel containing chamber as argued by the applicant. Additionally, it is contended that the open-ended transitional language “*comprising*” permits the inclusion of additional features. Can the inner flexible liner as a whole be two separate liners? There is no such specific indication about the structure of the claimed liner in the present claims.

23. With respect to applicant’s arguments concerning Kinkelaar et al’193, applicant argues that “*Kinkelaar et al’193 does not disclose a fuel container (cartridge) with both an outer casing and a flexible inner liner*”. The examiner strenuously but respectfully disagrees with the position affirmed by the applicant. As a clarifying matter, the examiner states that Kinkelaar et al’193 (See ABSTRACT) teaches: (a) a container defining a volume for holding a liquid fuel; b) a reservoir structure positioned within the volume and into which at least a portion of the liquid fuel wicks. Certainly, features described by (a) and (b) above positively constitute outer casing and a flexible inner liner, respectively. Independent claim 1 only calls for “*an inner flexible liner*”. If applicant believes that the disclosed reservoir structure is not equivalent to the claimed liner, then the examiner contests that basically, a liner is per se a liner [*sic*]. That is, a liner is not a bladder, or a container or holder specifically defining a major structure. Again, a liner is per se

a liner[*sic*]; and equating the disclosed reservoir structure to so-claimed flexible inner liner lacking a defined structure is reasonable. Now, if applicant believes that the disclosed reservoir restructure is not an inner flexible liner because it is not flexible, then the examiner avers that the term “*flexible*” is a term of degree. Thus, absent specific degree of flexibility to further limit the claimed inner liner, it is contended that any structure is flexible, to certain extent, regardless of its construction material. In other words, a material may exhibit a high degree of flexibility or a low degree of flexibility depending on its construction material.

### ***Conclusion***

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond Alejandro  
Primary Examiner  
Art Unit 1745



RAYMOND ALEJANDRO  
PRIMARY EXAMINER